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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,006	04/05/2004	Toru Kamiwada	1573.1028	1598

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EXAMINER	
NGUYEN, PHU K	
ART UNIT	**PAPER NUMBER**
2673	

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/817,006	KAMIWADA ET AL.	
	Examiner	Art Unit	
	Phu K. Nguyen	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Phu Nguyen

PHU K. NGUYEN
PRIMARY EXAMINER
GROUP 2300

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/5/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by BAKER et al. (5,363,475).

As per claim 1, Baker teaches the claimed "information processing apparatus for displaying a plurality of linked objects in a virtual three-dimensional space in accordance with field-of-view data, said field-of-view data defining a field-of-view and a viewpoint in said virtual space" (Baker, column 12, lines 9-29), said information processing apparatus comprising: "a memory for storing object data" (Baker, database store 7), and "control means for generating images of said objects in accordance with said object data stored in said memory and in accordance with said field of view" (Baker, the array of CPUs 10) and "rendering said generated images onto a two-dimensional frame" (Baker, column 12, lines 15-17; the perspective projection of image onto a two-dimensional display screen), "said control means hierarchically sorting said objects in accordance with link data which indicates links between said objects, for said rendering" (Baker, linked objects are arranged on a hierarchical tree; column 15, lines 4-25).

Claim 2 adds into claim 1 "said control means renders the images and/or partial images of said objects in order determined by said hierarchical sorting and in accordance with said link data" (Baker, column 17, line 46 to column 18, line 7).

Claim 3 adds into claim 1 "said control means renders the images and/or partial images of said objects in order determined by said hierarchical sorting" (Baker, column 19, lines 6-14), and "said control means renders images and/or partial images of objects of a group of one object and one or more other objects to which said one object is linked, in order of the distance from said viewpoint" (Baker, column 19, lines 16-49).

As per claim 4, Baker teaches the claimed "information processing apparatus for displaying linked objects in a virtual three-dimensional space in accordance with field-of-view data, said field-of-view data defining a field-of-view and a viewpoint in said virtual space" (Baker, column 12, lines 9-29), said information processing apparatus comprising: "a memory for storing object data" (Baker, database store 7), and "control means for generating images of said objects in accordance with said object data stored in said memory and rendering said generated images onto a two-dimensional frame" (Baker, CPUs 10 and column 12, lines 15-17; the perspective projection of image onto a two-dimensional display screen), "said control means rendering the image of one object and the image of another object to which said one object is linked" (Baker, linked objects are arranged on a hierarchical tree; column 15, lines 4-25); "wherein the image of said other object is rendered before the start of or after the end of rendering said one object or between said start and said end of rendering" (Baker, column 16, lines 26-36; the objects are rendered according the traversing of their positions in the hierarchical tree; therefore, one object is rendered before the start of or after the end of rendering

said another object or between said start and said end of rendering).

Claim 5 adds into claim 4 "said control means renders the image or partial images of said one object and the image of said other object in accordance with the distance from said viewpoint" (Baker, column 19, lines 16-49).

As per claim 6, Baker teaches the claimed "program product stored on a storage medium for use in an information processing apparatus and for displaying a plurality of linked objects in a virtual three-dimensional space in accordance with field-of-view data, said field-of-view data defining a field-of-view and a viewpoint in said virtual space" (Baker, column 12, lines 9-29; software to run the system in column 13, lines 17-33), said program product comprising the steps of: "generating images of said objects in accordance with said object data and in accordance with said field of view" (Baker, the array of CPUs 10) and "rendering said generated images onto a two-dimensional frame in order determined by said hierarchical sorting" (Baker, column 12, lines 15-17; the perspective projection of image onto a two-dimensional display screen), "hierarchically sorting said objects in accordance with link data which indicates links between said objects" (Baker, linked objects are arranged on a hierarchical tree; column 15, lines 4-25).

Claim 7 adds into claim 6 "rendering the images and/or partial images of said objects in order determined by said hierarchical sorting and in accordance with said link data" (Baker, column 17, line 46 to column 18, line 7).

Claim 8 adds into claim 6 "rendering the images and/or partial images of said objects in order determined by said hierarchical sorting" (Baker, column 16, lines 26-36), and "the step of rendering comprises rendering images and/or partial images of objects of a group of one object and one or more other objects to which said one object is linked, in order of the distance from said viewpoint" (Baker, column 19, lines 6-49).

As per claim 9, Baker teaches the claimed "program product stored on a storage medium for use in an information processing apparatus and for displaying a plurality of linked objects in a virtual three-dimensional space in accordance with field-of-view data, said field-of-view data defining a field-of-view and a viewpoint in said virtual space" (Baker, column 12, lines 9-29), said program product comprising the steps of: "generating images of said objects in accordance with said object data" (Baker, CPUs 10 and column 12, lines 15-17; the perspective projection of image onto a two-dimensional display screen), "rendering said generated images onto a two-dimensional frame, wherein the step of rendering comprises rendering the image of one object and

the image of another object to which said one object is linked" (Baker, linked objects are arranged on a hierarchical tree; column 15, lines 4-25); "wherein the image of said other object is rendered before the start of or after the end of rendering said one object or between said start and said end of rendering" (Baker, column 16, lines 26-36; the objects are rendered according the traversing of their positions in the hierarchical tree; therefore, one object is rendered before the start of or after the end of rendering said another object or between said start and said end of rendering).

Claim 10 adds into claim 9 "the step of rendering comprises the image or partial images of said one object and the image of said other object in accordance with the distance from said viewpoint" (Baker, column 19, lines 6-49).

As per claim 11, Baker teaches the claimed "method for processing object data for displaying a plurality of linked objects in a virtual three-dimensional space in accordance with field-of-view data, said field-of-view data defining a field-of-view and a viewpoint in said virtual space" (Baker, column 12, lines 9-29), said method comprising the steps of: "hierarchically sorting said objects in accordance with link data which indicates links between said objects" (Baker, linked objects are arranged on a hierarchical tree; column 15, lines 4-25), and "generating images of said objects in accordance with said object data and in accordance with said field of view" (Baker, the array of CPUs 10) and "rendering said generated images onto a two-dimensional frame in order determined by said hierarchical sorting" (Baker, column 12, lines 15-17; the

perspective projection of image onto a two-dimensional display screen),.

As per claim 12, Baker teaches the claimed "method for processing object data for displaying a plurality of linked objects in a virtual three-dimensional space in accordance with field-of-view data, said field-of-view data defining a field-of-view and a viewpoint in said virtual space" (Baker, column 12, lines 9-29), said method comprising the steps of: "generating images of said objects in accordance with said object data" (Baker, CPUs 10 and column 12, lines 15-17; the perspective projection of image onto a two-dimensional display screen), "rendering said generated images onto a two-dimensional frame, wherein the step of rendering comprises rendering the image of one object and the image of another object to which said one object is linked" (Baker, linked objects are arranged on a hierarchical tree; column 15, lines 4-25); "wherein the image of said other object is rendered before the start of or after the end of rendering said one object or between said start and said end of rendering" (Baker, column 16, lines 26-36; the objects are rendered according the traversing of their positions in the hierarchical tree; therefore, one object is rendered before the start of or after the end of rendering said another object or between said start and said end of rendering).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (571) 272 7645. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, bipin Shalwala can be reached on (571) 272 7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phu K. Nguyen
September 30, 2005

PHU K. NGUYEN
PRIMARY EXAMINER
GROUP 2300